

Urbanism of the Air

KEVIN BUKOWSKI

University of Michigan

LIZ SZATKO

University of Michigan

DAVID KARLE

University of Nebraska-Lincoln

With housing demands rising in already dense urban environments new housing typologies must be tested. In the seventeenth century the medieval version of the London Bridge addressed issues of a growing city by coupling infrastructure with acts of domesticity included a central chapel, shops, and housing. In 2003 the Porter House by SHoP Architects challenged conventional housing typologies in New York City with their air rights proposal. The Porter House functions on multiple levels and challenges historic conservation and current zoning code. In 2009 twenty-five luxury villas were illegally built by developers on the roof of the multi-story shopping mall in Hengyang, China. These examples challenge normative building practices and provide a foundation for further investigation of housing typology and urbanism of the air. In order to increase density in land-poor modernizing cities, the architectural discipline must balance the opportunities of air rights proposals over historic buildings by challenging the nostalgic notion of preservation.

Historic buildings are situated in the middle of the dense modern world of skyscrapers and commercial business districts. The relationship between old and new city fabric clearly

can be seen spatially, materially, and aesthetically. The large footprint and short stature typical of historic landmark buildings conflict with a modern city's demands to maximize buildable space. The question then arises of what should be done with a building we wish to preserve, but also wish to advance with us into the modern world?

If a desire exists to preserve our historic built environment, we must look beyond the untouchable sanctity of our preserved historic buildings. The use of air space allows the opportunity to increase density while preserving history. This reutilization allows the original building to be preserved as a cultural hub for the modern city

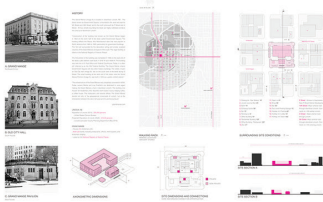
The above considerations were tested as a design-research proposal on a prototypical 1920 historic building. "Grand" in both name and materiality, The Grand Manse is a stately concrete and glass building currently listed on the United States National Registry of Historic Places. The air rights proposal makes contextually conscious use of valuable air rights space above the historic Grand Manse by providing a unique architectural solution that accommodates the needs of a growing

urban density. This proposal frames a critical and timely issue – historic preservation (past) and urban density (future). As the idea of preservation in dense urban environments is revisited by each generation of architects and developers, we must ask ourselves "not what to keep, but what to give up, what to erase and abandon." (Venice Biennale 2010: Cronocaos, Italy, Venice, 2010" Office for Metropolitan Architecture) This essay will situate the often under used but widely available opportunity of urbanism of the air with the growing housing demands of cities.

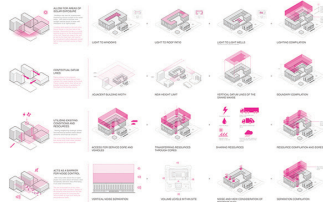
AIR RIGHTS _Urbanism of the air



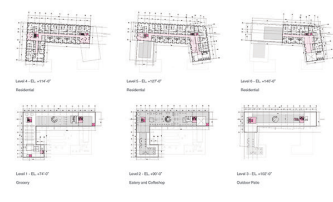
SITE INVENTORY Grand Marise



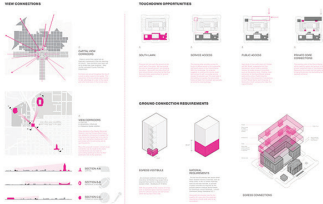
BUILDING FRAMEWORK Grand Marise



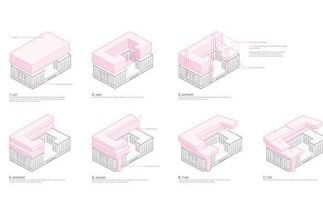
BUILDING Floor Plans



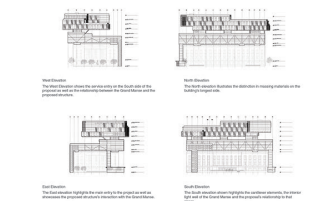
SITE ANALYSIS Grand Marise



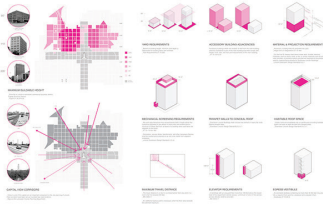
MASSING Diagrams



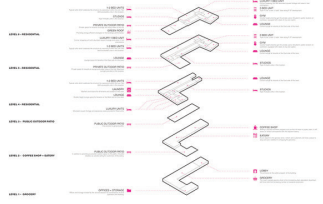
BUILDING Elevations



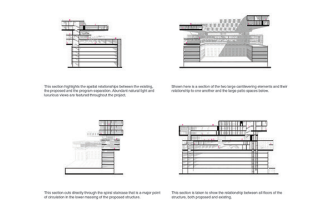
AIR RIGHTS ARCHITECTURE ZONE 04



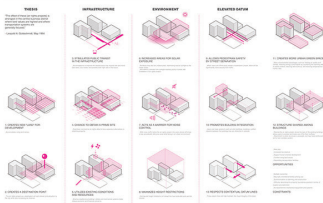
PROGRAM Diagram



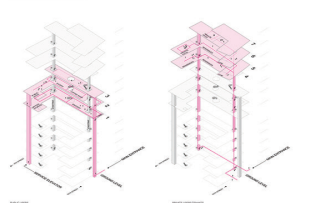
BUILDING Sections



AIR RIGHTS ARCHITECTURE PRINCIPLES



CIRCULATION Diagrams



BUILDING Facade Details

